

Your
Seattle
City Light

Memorandum



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DATE : November 7, 1979
TO : Robert Murray, Superintendent
FROM : Carole V. Coe, Director, Administrative Services
SUBJECT : PCB at City Light

Revised EPA requirements for storing and disposing of PCBs were explained at a recent EPA-sponsored seminar attended by Safety Unit staff. One of the requirements particularly impacts City Light; ~~all transformers in our system must now be assumed to be PCB contaminated, unless individual dielectric testing proves otherwise.~~ PCB and PCB contaminated transformers can be used in the system as long as they are totally enclosed but in case of failure strict regulations must be complied with.

Evidence of the possibility of contamination can be found in the ~~top trans- formers received from Westinghouse in August and September of 1976.~~ These were ordered as non-PCB transformers but subsequent (costly) testing showed that ~~seven qualified as PCB contaminated and three as PCB transformers.~~ Contamination was traced to residual PCBs in the filling equipment used by the manufacturer.

The following definitions are used for identification purposes:

PCB transformer

~~Insulating oil contains 500 or more ppm PCB.~~ (Must be labeled "PCB", oil must be disposed of by incineration or transported to EPA-approved land fill site, damaged transformer cannot be rebuilt or salvaged)

PCB Contaminated transformer

~~Insulating oil contains 50-499 ppb PCBs.~~ (Labeling not required, oil disposal is same as for PCB, but damaged transformer can be rebuilt or salvaged, with certain limitations)

Non-PCB transformer

~~Insulating oil contains less than 50 ppb PCBs.~~ Can be identified by individual dielectric testing only.

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Specifically, it appears that some changes will need to be made in procedures in the transformer repair area of the Electric Shop. Currently, when a damaged transformer comes in, it is given a visual inspection to determine if it is repairable. If it is determined to be unrepairable on the basis of the visual inspection, it is sent to salvage. Under the EPA regulations ~~the transformer would have to be tested at this point~~ to determine if it were PCB, PCB contaminated, or non-PCB. If it tested as PCB contaminated it could go to salvage provided the oil had not been drained and the transformer was identified as PCB contaminated when sold for salvage. ~~If it tested as a PCB transformer it could not be salvaged.~~

When a visual inspection is not adequate to determine the condition of a transformer, the oil is emptied into a common salvage oil holding tank so the inside of the transformer can be inspected. From a safety standpoint, this practice will have to be evaluated and work procedures established that will comply with PCB handling regulations.

Since any oil from transformers is to be considered at least PCB contaminated until tested, all the oil in the salvage holding tank must be considered contaminated and the tank so labeled (an exception to the 'no label' statement). Jim Evert, chief toxicologist for the local office of the EPA, has suggested that this tank could be tested for PCBs each time it becomes full and is ready to be sold. ~~It cannot be sold as salvage oil unless, by test, it is shown to contain less than 50 ppm of PCBs.~~ To further complicate matters, ~~if any PCBs (less than 50 ppm) are identified by test the oil may be sold for salvage but may not be used for certain things, such as dust control.~~ It would be the utility's responsibility to inform the buyer of this.

In summary, to provide proper safe working conditions for employees and to comply with EPA regulations regarding the use of PCBs in a closed system, ~~the following are some areas that need to be looked at:~~

1. Handling procedures for transformer inspection/repair work in the Electric Shop.
2. Decisions need to be made and procedures established for the disposal and/or possible salvage of oil from damaged transformers. The EPA regulations restrict salvage and this could be costly.
3. ~~Appendix H of the Emergency Operations Procedures manual needs to be updated to address the fact that all transformers are now considered to be PCB contaminated, unless proved otherwise by individual test. Storage and record-keeping sections may need to be reevaluated.~~

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Because of the complexity of the regulations, ~~it is suggested that representatives from all concerned divisions meet to discuss precisely what impact the revised EPA regulations have on City Light operations and to clarify areas of responsibility for accomplishing compliance.~~ There seems to be some confusion about what needs to be done and by whom, although a willingness to "get on with it" is evident. ~~Ultimately, it may be prudent to have an outside consultant service, such as described in the attached letter from General Electric, evaluate our system and PCB procedures to ensure that EPA requirements are met at City Light.~~

IJ:mgs

Attachment

cc: Recchi
Sickler
Rockey
Hunich
Coe
Henault
Mandapat
Storms
Young, D.
Fletcher
Peha
Jackson, I.
File

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